IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/842,495
Filed: April 25, 2001
Inventors:
Sunil Shanthaveeraiah
Aseem Rastogi
Raghavendra Rao

Title: System and Method for On-Demand Node Creation for Fabric Devices

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Examiner: Truong, Cam Y T
Group/Art Unit: 2162
Atty. Dkt. No: 5181-79200

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

Robert C. Kowert
Printed Name

Signature

November 22, 2005
Date

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reason(s) stated below.

Claims 1-15, 23-59, 67, and 68 are pending in the application. Reconsideration of the present case is earnestly requested in light of the following remarks. Please note that for brevity, only the primary arguments directed to the independent claims are presented, and that additional arguments, e.g., directed to the subject matter of the dependent claims, will be presented if and when the case proceeds to Appeal. Claims 1-9, 12, 14, 43-52, 44, 55, 57, 59, 67 and 68 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jantz et al. (U.S. Patent 6,584,499) (hereinafter "Jantz") in view of Kidder et al. (U.S. Patent 6,880,086) (hereinafter "Kidder"). Claims 23-25, 28-30 and 40-42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Blumenau (U.S. Patent 6,665,714) (hereinafter "Blumenau '714") in view of Kidder. Additionally, various dependent claims are rejected under 35 U.S.C. § 103 in view of various cited prior art references. Applicants note the following clear errors in the Examiner's rejections. **Applicants submit that the Examiner has failed to provide a *prima facie* rejection of independent claims 1, 4, 9, 23, 43, 47, 52 and 67.**

Regarding claims 1 and 43, the Examiner admits that Jantz does not teach requesting a fabric driver that is part of an operating system for the host system to create an operating system device node in the host system for each of a subset of fabric devices not already online, wherein each operating system device node provides a mechanism for accessing a corresponding one of the subset of fabric devices through the operating system executing on the host system. The Examiner relies on Kidder, citing column 36, lines 38-40. However, Kidder fails to teach or suggest requesting a fabric driver that is part of an operating system to create an operating system device node in the host system for each of a subset of fabric devices not already online, where each operating system device node provides a mechanism for accessing a corresponding one of the subset of fabric devices through the operating system. Instead, Kidder teaches a method for upgrading software components within a network device. Like Jantz, Kidder has absolutely nothing to do with requesting a fabric driver to create an operating system device node in a host system. The cited passage of Kidder is part of a discussion of configuring off-line devices by copying configuration data from a NMS database. In fact, the cited passage merely states that a "network manager may configure many new network devices off-line." Nowhere does Kidder mention requesting a fabric driver that is part of an operating system for the host system to create an operating system device node in the host system for each of a subset of fabric devices not already online. Instead, Kidder teaches that a NMS server and database may maintain configuration data used to configure network devices while they are off-line. Neither Jantz, nor Kidder, whether considered individually or in combination, have anything to do with how fabric devices are accessed through a host system's operating system. Instead, both Jantz and Kidder are only concerned with configuring, such as through copying configuration data, network devices.

Additionally, Jantz in view of Kidder fails to teach or suggest receiving a list from a fabric driver of fabric devices available to a host system, wherein the fabric driver is part of an operating system for the host system. The Examiner cites column 14, lines 1-30 of Jantz and argues that displaying "a list of storage devices available to a user on a window includes receiving a list of fabric devices available to a host system from a fabric driver that is part of an operating system. However, the cited passage makes no mention of receiving such a list from a fabric driver that is part of the operating system. Instead, the cited passage describes the user interface of Jantz' discover-monitor application. Jantz' discover-monitor application does not receive a list of fabric devices available to a host system from a fabric driver that is part of an operating system for the host system. Jantz describes two methods for obtaining a list of devices. In the first method, a user "preferably enters the device into DMA 822, and DMA 822 then starts a monitor thread 824 for the entered device" (Jantz, column 15, lines 44-51). In other words, a user of Jantz system may manually input information about a device. Alternatively, Jantz' discover-monitor application may automatically discover all direct network attached devices and all servers. The discover-monitor application then obtains from each server a list of devices it knows about. Jantz does not

describe receiving a list *from a fabric driver* of fabric devices available to a host system, wherein the fabric driver is part of an operating system for the host system.

Furthermore, Jantz in view of Kidder does not disclose requesting the fabric driver to create an operating system device node in the host system for each of the fabric devices in the subset not already online, wherein each operating system device node provides a mechanism for accessing a corresponding one of the subset of fabric devices through the operating system executing on the host system. The Examiner refers to the device connection table described at col. 16, lines 13-20 of Jantz. However, Jantz teaches that the device connection table is simply a connection map created from information obtained from the device controller 806 and thus *is clearly not a system device node* in a host system that provides a mechanism for accessing the device through the operating system on the host system. Instead, Jantz teaches that the connection table is used by the discover-monitor applet 822 to display the device connections, as is shown in Figs. 6 and 7 of Jantz. The connection table in Jantz *clearly has nothing to do with operating system device nodes* as would be readily apparent to anyone of ordinary skill in the art. Jantz' teachings pertain to an application monitoring and configuring of devices on a network. Jantz' teachings have no relevance to creating an operating system device node in the host system for each of a subset of fabric devices not already online.

Kidder is not relied upon by the Examiner to teach (nor does Kidder teach) receiving a list from a fabric driver of available fabric devices or requesting the fabric driver to create an operating system device node each fabric device. Thus, Kidder fails to overcome the deficiencies of Jantz.

Regarding claims 4 and 47, the Examiner admits that Jantz fails to teach creating an operating system device node in the host system for each of the fabric devices in the selected subset not already online, wherein each operating system device node provides a mechanism for accessing a corresponding one of the subset of fabric devices through an operating system executing on the host system. The Examiner relies upon Kidder, citing column 36, lines 38-40. However, as discussed above regarding claims 1 and 43, Kidder does not teach or suggest, either at the cited passage or elsewhere, creating an operating system device node in a host system for each fabric device in a select subset not already online. Neither Jantz nor Kidder, whether considered individually or in combination teach or suggest anything in regard to providing operating system device nodes that provide a mechanism for accessing corresponding devices through an operating system executing on the host system, as discussed above.

Additionally, Jantz in view of Kidder fails to teach or suggest receiving a request to create operating system device nodes in the host system for each fabric device in a selected subset of the fabric device available to

the host system. The Examiner refers to Jantz management protocol server being queried via an RPC agent thread for its associated device properties, citing column 16, lines 13-20 of Jantz. However, a query for device properties is very different from a request to create operating system nodes in a host system.

Regarding claims 9 and 52, the Examiner admits that Jantz fails to teach creating an operating system device node within the host system for each of the identified devices in the subset that is not already online, wherein each operating system device node provides a mechanism for accessing a corresponding one of the subset of the identified devices through an operating system executing on the host system. The Examiner again cites column 36, lines 38-40 of Kidder, which, as noted above, describes configuring off-line network devices and does not mention anything regarding creating operating system device nodes with a host system for devices.

Additionally, Jantz in view of Kidder fails to disclose receiving a request to on-line a subset of the identified devices. The Examiner cites column 15, lines 55-60 of Jantz states that "upon locating a server, discover-monitor applet 822 request from the server a list of all storage controllers or devices it has associated with it" and that "[a]fter locating all the devices on the network to be managed, DMA 822 starts a monitor thread 824 for each device." The Examiner argues that Jantz system "has received the request [to on-line a subset of identified devices] before identifying devices for monitoring." However, the Examiner's reasoning is incorrect. Just because Jantz' discover-monitor application requests a list of all devices associated with a server and creates a monitor thread for each one does not imply anything about receiving a request to on-line devices. Applications frequently discover and monitor devices for which they did not receive any sort of request regarding bringing the devices on-line.

Regarding claim 67, Examiner admits that Jantz does not teach requesting that each of the fabric devices in the subset be brought online if not already online for use from the host system. The Examiner relies upon Kidder, again citing column 36, lines 38-40. However, as noted above, neither this passage nor any other portion of Kidder, teaches or suggests anything about requesting that fabric devices be brought online, if not already online. Instead, as shown above, the cited passage describes configuring, by copying configuration data from a database, off-line network devices.

Regarding claim 23, the Examiner admits that Blumenau does not teach or suggest a fabric driver that is configured to online a selected subset of fabric devices so that the selected subset of fabric devices are accessible from the host system, wherein the fabric driver is further configured to create operating system device nodes within the host system for each device of the selected subset, wherein each operating system device node provides a mechanism for accessing a corresponding one of the subset of fabric devices through the operating system

executing on the host system. The Examiner relies on Kidder, again citing column 36, lines 38-40. However, as noted above, neither this passage nor any other portion of Kidder, teaches or suggests anything about requesting that fabric devices be brought online, if not already online. Thus, Blumenau and Kidder, both singly and in combination, clearly fail to teach or suggest the limitations of Applicants' claim 23.

Applicants note that the Examiner has interpreted the same, two-line passage from Kidder as teaching: requesting a fabric driver to create an operating system device node for a fabric device (claims 1 and 43), creating an operating system device node for a fabric device (claims 4, 9, 47 and 52), requesting that fabric devices be brought online (claim 67), and a fabric driver configured to online fabric devices. However, the cited passage simply states, "[i]n the previous example, the network manager configured one new network device off-line" and [h]owever, a network manager may configure many new devices off-line." From this large diversity of interpretations for the same two lines of Kidder, it is blatantly clear that the Examiner is simply trying to twist the meaning the reference in hindsight to fit the limitations of Applicants' claims. However, as shown above, neither the cited passage nor any other portion of Kidder supports the Examiner's interpretation.

In light of the foregoing remarks, Applicant submits the application is in condition for allowance, and notice to that effect is respectfully requested. If any extension of time (under 37 C.F.R. § 1.136) is necessary to prevent the above referenced application from becoming abandoned, Applicants hereby petition for such an extension. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 501505/5181-79200/RCK.

Also enclosed herewith are the following items:

☒ Return Receipt Postcard
☒ Notice of Appeal

Respectfully submitted,

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